

SUGGESTED SUBMITTAL REQUIREMENTS

This handout is provided to each consultant to communicate the expectations of the Architecture and Engineering Division for submittals and is intended as a guideline for use in contract negotiation and project submittals. This document is to be shared with your consultants as the same level of effort will be expected of them.

SCHEMATIC DESIGN:

1. Cover Sheet to include Building Code Data (suggested outline attached).
2. Site Plan with vicinity map and site concept illustrated. Indicate access, roads, parking, and property lines. (Site survey should be completed with horizontal and vertical control reflected in this submittal)
3. Floor Plan(s) with overall dimensions and spaces titled.
4. Structural - provide narrative description of potential structural systems.
5. Elevations with exterior materials illustrated, labeled, and overall vertical dimensions indicated.
6. Narrative descriptions of potential Mechanical and Electrical systems.
7. Existing Utilities shown on the site plan with sizes, voltages, etc., marked.
8. Flow Diagrams and/or One-Line Diagrams for mechanical and/or electrical drawings where the mechanical and/or electrical design is central to the project program.
9. Schematic Phase Project Estimate

This is a conceptual submittal in response to a Building Program developed by the Using Agency in conjunction with Architecture and Engineering Division's Project Manager.

DESIGN DEVELOPMENT/PRELIMINARY:

This submittal must include enough information to allow checking to reveal that Building Program requirements are met and zoning and building code issues are adhered to as required by governing jurisdictions. Includes all work required in the Schematic Design phase expanded to include the following:

1. Cover Sheet - Building Code Data, Vicinity Map, Design firm and consultants names and addresses.

2. Site Plan - dimensions of overall site, building, and associated improvements dimensioned, existing and proposed contours with survey benchmark identified. Access for pedestrian and vehicles indicated. Existing and proposed utility work shown.
3. Floor Plan (s) - all levels, spaces titled w/most appropriate dimensions and detail references noted.
4. Elevations - with exterior materials noted, and vertical dimensions included for wall height(s), openings, floors and ceilings.
5. Cross and Longitudinal Sections - with roof, wall and floor materials noted, poche'd and referenced back to where they were taken from.
6. Structural System - established, illustrated, and referenced on plans, sections, and details.
7. Mechanical Systems - laid out in plans with accurate architectural backgrounds with details sufficient to warrant plans check. All existing equipment is shown which is interconnected to new equipment.
8. Completed Equipment Schedules, valve schedules, pumps, fans and other major equipment schedules showing make, model, size type, power, voltage, service, location and tag name. Information may change slightly as project progresses. Relocated equipment shown.
9. Mechanical and Electrical Demolition drawings 100% complete showing all points-of-connection to new.
10. Electrical System - laid out in plan with major preliminary equipment and schedules, fixture locations on plan view(s) and preliminary fixture and panel schedules.
11. Plumbing System - laid out in plan with details and schedules fixture locations on plan view(s), and fixture and panel schedules.
12. Electrical 1-Line Diagrams and/or Mechanical Flow Diagrams which illustrate the primary system functions are 100% complete.
13. Tentative Sequence of Operation complete for HVAC controls and other system controls which require it (either in drawings or specifications or both).
14. Legends Complete with all symbols used on the drawings. Symbols which are totally unrelated should be removed.
15. Short Form Specifications indexed.

16. Project Estimate - updated and complete including all costs associated with the project. May include systems and or specifications section breakdown. Funding sources need to be included and identified.

CONSTRUCTION DOCUMENTS: Includes all work required in the above phases expanded to include the following:

1. Cover Sheet - include index to drawings, completed building code data, project vicinity map(s), list of design professionals associated with the project with phone numbers and addresses, date, project title and MONTANA A/E number. Other information deemed appropriate by the design professional such as abbreviation list, materials symbols, poche' and legends.
2. Demolition Plans - as appropriate to illustrate proposed demolition including necessary details and notes.
3. Site Plan(s) - illustrating all site improvements including utilities sized, located, and dimensioned. Horizontal and vertical control with benchmark including new and existing contours. Property lines, access and parking, soil testing drill holes located and identified, and landscaping layout with schedules and details. North arrow on all plans and finish floor elevation indicated on all pertinent building plans (new and existing if applicable). An indication of location for contractor's job shack, employee parking, materials and equipment storage.
4. Footing and Foundation Plan(s) - indicating all appropriate architectural information including dimensions, detail references, and details.
5. Floor Plan(s) - all levels, fully dimensioned and including section and detail references to where detail is drawn, door and window references and dimensions, rooms and spaces titled and/or numbered.
6. Roof Plan(s) - (and roof framing plan where necessary) with appropriate dimensions, slopes, penetrations, and details noted and referenced.
7. Elevations - indicating all exterior materials by note and poched', vertical dimensions including wall plate height, window and door heights, foundation depths, and roof slopes noted.
8. Cross, Longitudinal, and Wall Sections - with vertical dimensions, new materials poche'd, noted and cuts referenced to where they were taken from. Increase line weight at cut.
9. Room Finish, Door, and Window Schedules - complete with associated details and notes.

10. Details and Notes - as needed to explain the project with poche', dimensions where appropriate, and materials noted to explain construction.
11. Structural - plans, sections, details (poche'd), schedules, notes, dimensions and references to where the details were taken from and or shown.
12. Mechanical - plans, sections, details, schedules, and notes as appropriate to explain the project.
13. Electrical - plans, sections, details, schedules, and notes as appropriate to explain the project.
14. Plumbing - plans, sections, and details along with schedules and notes to appropriately explain project.
15. Equipment Schedules 100% complete.
16. Construction Notes clearly define all work to be done. General Notes complete for general requirements on the drawings.
17. Alternate Work clearly defined on drawings and in specifications.
18. Specifications - complete with "boiler plate" covering construction and construction administration procedures.
19. Project Estimate - unit cost estimate of project including consultant fees, administrative costs, site development, utilities and construction required contingencies; all costs to be charged to a project. Funding sources to be indicated by amount and source.

If the Building Program requirements have been updated during production, the changes need to be reflected in the Building Program revision and a copy furnished with documents submitted for plan review.

NOTE: Sub-consultants are expected to produce drawings and specifications and with references to details on the drawings same as the principle design professional. THIS SUBMITTAL WILL BE REVIEWED PRIMARILY FOR BIDDING INFORMATION, CONSTRUCTIBILITY, AND COMPLIANCE WITH BUILDING CODES AND STANDARDS.

GENERAL:

1. Label submittals as Schematic, Design Development/Preliminary or Construction Documents for review.

2. Use correct line weights. On installation drawings, show existing in light line weight, and new in heavy line weight. On demolition or removal drawings, show existing to remain in light line weight, and existing to be removed in heavy line weight. For existing pipes, ducts, and like items, show the point-of-connection to the new labeled as P.O.C.
3. Show North arrows on all plan(s). Show section markers on plan(s) for every section. Show scales in numbers on all plans, elevations, sections, and details.
4. Use numbered Construction Notes to tell contractor what to do. Notes to be specific to the task.
Example:

Remove AHU #6 and all associated duct work and controls.
Route new 4" LPS line from existing 8" LPS main to new preheat coil.
5. Use General Notes (not numbered) to indicate general requirements for the entire drawing.
Example:

All demolished equipment and material to be disposed of off Owner's property at Contractor's expense.

All wall and floor penetrations to be sleeved and sealed per detail 6/M7.
6. Abbreviations and symbols need to be project specific. Unrelated abbreviations and symbols need to be removed from master legend.
7. Dimensions, labels, and identifications, need to be included on all drawings and details.
8. Poche' needs to be used to indicate new work, outline and label existing work to remain and dash lines for existing work to be removed where appropriate.

Please be cognizant that the Architecture and Engineering Division will **not** accept working drawings where numbers are used in lieu of notes that are explained in a schedule on the drawing where they are used.

BUILDING CODE DATA:

BUILDING CODE OUTLINE

Project: _____
A/E # ____ - ____ - ____

'94' UBC

tbl. 3-A 1-58	tbl 5A	Occupancy Classification_____
tbl. 5-B 1-98,99 Chapt. 6 thru 12 1-100 thru 1-108	tbl 5C Chapt 18 thru 22	Type of Construction_____
tbl. 5-B 1-98,99	tbl 5C	Floor Area_____
		total_____
tbl. 5-B 1-98,99		Number of Stories_____Height_____
fig. 16-2 2-41	fig 23-2	Seismic Zone_____
tbl. 16-C 2-31	tbl 23C	Roof Snow Load_____
tbl. 16-A	tbl 23A	Floor Load_____
fig. 16-1 2-40	2312 p153, 23-1	Wind Load_____
tbl.15-A	tbl 32A	Roofing Classification_____ 1-227
tbl. 5-A 1-96,97	504 tbl 5C	Location on property: North_____
		East_____ South_____ West_____
tbl 10-A 1-198,199	tbl 33A	Occupancy Factor

PROJECT ESTIMATE OUTLINE:

Agency	Administrative	_____
Agency/A/E Div.	Programming/Travel	_____
Proj. Consult.	Site Survey	_____
	Soils Testing	_____
	Site Development	_____
	Landscaping	_____
	Access and Parking	_____
	Utilities	_____
	Other	_____
Proj. Consult. Building Construction Cost		
	Architectural	_____
	Structural	_____
	Mechanical	_____
	Electrical	_____
	Other	_____
	Furnishings and Equipment	_____
	Other User Items	_____
	Contingency: 10% during design	_____
	5% at bidding	_____
	Consultant Professional Fee	_____
	A/E Division Fee 3% or 5%	_____
	(of project construction cost)	
	TOTAL PROJECT COST	_____